CALGARY WOODTURNERS GUILD NEWSLETTER

Issue 93, September 2019

Norm called the meeting to order.

Welcome to new members Scott, Ted, and Terry (hope I got the spelling right)

Couple of reminders:

Graham needs pieces for the display cases, based on available space he needs approx. 25 smaller pieces or less if the pieces are larger. Reminder the pieces would out of commission for the year, of course the pieces would be available on request. Along with the piece a card with your name and a price if it's for sale.

Ken has some 20", 8" and 6" pieces of ash.

We heard from Steve Olson from accounting. Donations for the foodbank was $350.

The Calgary Wood Workers Guild is now on Facebook and sounds like Instagram will considered in the future.

Greg Dahl has a DeWalt 13" planner for sale complete with helical cutting head, he is asking $650.

Greg also has some free firewood, please contact Greg.

We heard from Terry on "How Sharpe is Sharp enough.

Safety first when it comes to grinders and grinding wheels. Remember if those wheels have ever been dropped, they are not safe to use. The ping test will let you know if you have a fracture or crack in the wheel.

The Aluminum Oxide wheels are good for general tool shaping, however for repeatable sharpening the CBN wheels are becoming more popular.

CBN wheels:
- cut cooler
- safer
- no dressing
- virtually last forever
- no plugging up
- never change size, so jig setup remains consistent.

They come in a few different grits: 80, 180, 320, 600, and I just saw a 2000 online.

The sharper the tool, the less time you need to back to the wheels for sharpening.

We saw a product demo of the Tradesman DC variable speed, definitely the unit if you have the means.

And instead of trying to regurgitate the mountain of information covered on the CBD wheels I have included an attachment with the newsletter for more in depth follow up, thanks Terry.

We heard from Kai on Honing and general practice around sharpening, a couple of take always, "Don't use your finger or fingernail to check for sharpness, a piece of wood is more forgiving."

As the tool materials and sharping technology changes we don't find ourselves stropping, however we should be honing. Using the small diamond pads for honing lets you protect and re-establish that edge, before going back to the grinder.

There a number of benefits keeping this little pad in your smock:
- It saves time
- Less sanding
- Less pressure on the wood means, safer and more delicate operations

We saw a demo on honing the skew,

One thing to be aware of when honing is ensuring you don't roll over the edge, if this happens its back to the grinder.

A valid point of not honing high sweep tools, i.e. the wings on your bowl gouge, however a cylinder file can be used inside the spindle gouge.

Carbide teeth can also be honed

The small credit card size honing retail for around $20.

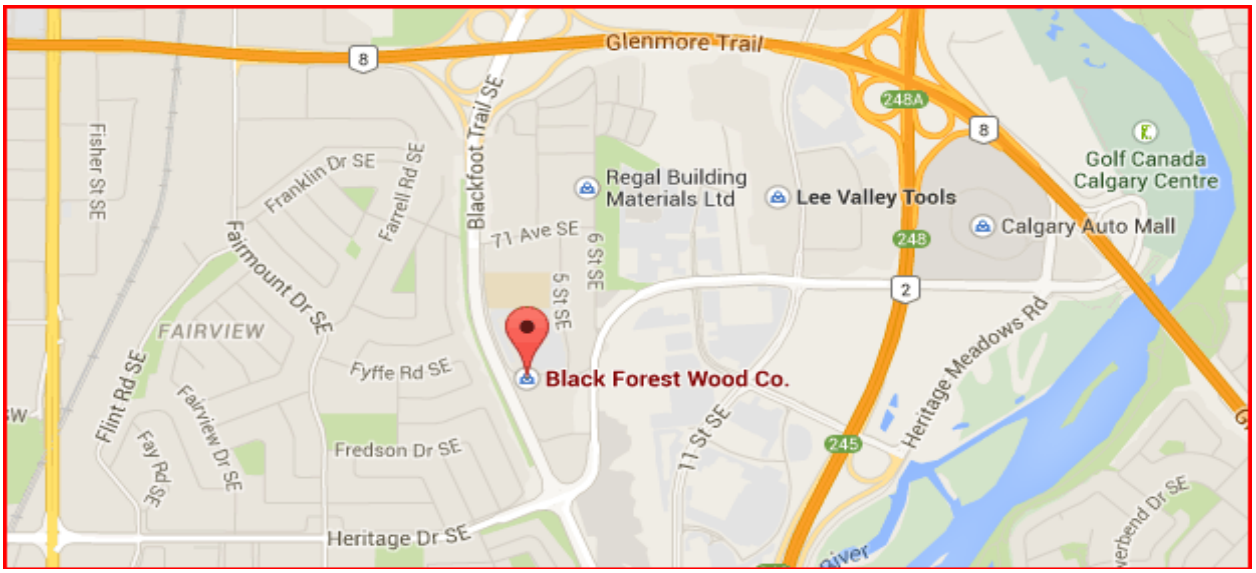
Lapping fluid can also be used to keep the hone clean.






Guild Meetings

The Calgary Woodturners Guild meets at Black Forest Wood Company (603, 77 Ave SE, Calgary) the first Tuesday of each month at 7:00 PM except for July and August. Visitors are always welcome.



About the Guild...

GUILD PURPOSE

To promote the art and craft of Woodturning in a way that expands the knowledge, safe practice, and enjoyment of woodturning, thereby benefitting both members and also the community

FOR THE MEMBERS:

- To provide all members with a method of regularly exchanging ideas and experience in woodturning
- To promote safety in woodturning
- To benefit from group size in acquiring published resources & materials

FOR THE COMMUNITY

- To bring an awareness of woodturning to the general public
- To provide charitable benefits to the community

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MEETINGS

The guild meets on the first Tuesday each month (except July and August) at 7:00 PM at Black Forest Wood Co., Bay 7, 603 - 77 Avenue SE, Calgary, AB.
Visitors are welcome

MEMBERSHIP DUES

Annual Dues - $30.00 with Email, otherwise $35.00
Dues paid on a calendar year basis

CLUB OFFICERS AND DIRECTORS

President: Norm Olsen
Vice President: Garry Goddard
Treasurer: Steve Olson
Secretary: Doug Drury
Director - Website Administrator: Sherry Willetts
Director - Program Manager: Terry Golbeck
Director - Sawdust Session coordinator: Ken Kindjerski
Director - Sawdust Session coordinator: Albert Daniels

Auditors: Dwayne Sims
Charitable Co-ordinator Carl Smith
Librarian: Carl Smith
Membership Records: Carl Smith
Newsletter: Brad Tink
Photographer: Vacant
Programs: Terry Golbeck
Public Displays: Graham Dolby
Raffles: Dave Beeman
School Liaison: Vacant
Public Sales: Kai Muenzer
Webmaster: Sherry Willetts
Members at Large: Jim Leslie, Vern Steinbrecker

Aluminium Core Corner Round (CR) CBN Wheels

Recent advances in electroplating technology have made possible the adhesion of CBN particles to aluminium using nickel substrate.

Aluminium Core CR CBN wheels offer advantages compared to Steel Core CBN Wheels.

Aluminium has the same or better tensile strength than steel. Aluminium is easier to machine and therefore can be machined to finer tolerances faster than steel, resulting in a truer running wheel with less tool bounce than on a steel wheel.

Aluminium transfers heat about 7 times faster than steel. When combined with CBN, which conducts heat 20 times faster than copper to the aluminium, you can sharpen at a cooler temperature with less risk of tool damage compared to a steel wheel.

An aluminium wheel is about 60% lighter in weight than a steel wheel. This weight reduction puts less stress on the grinder bearings and as there is less kinetic energy the free wheeling time for the grinder to stop is reduced. There is less need to balance an aluminium wheel. The reduced weight of aluminium wheels has the added advantage of lower shipping costs thereby offering more value.

The corner round allows sharpening of complex profiles by laying the tool flat on the grinder tool rest and simply guiding the tool edge along the rounded corner.

The corner round is safer than a sharp cornered wheel in case of accidental body contact.

Metal wheels are much safer than vitrified “stone” wheels as they do not come apart or potentially disintegrate.

Unlike vitrified wheels, CBN wheels do not need to be dressed and the face remains flat and true.

Metal wheels do not wear down and therefore do not reduce in diameter with use like vitrified wheels. Therefore sharpening jig set-ups remain the same with constant diameter metal wheels resulting faster and more accurate sharpening and longer tool life.

Vitrified Sharpening Stones

Summarized from:
http://www.georgiagrindingwheel.com/grindingwheels_basics.htm

Grit type and colour

Grit type is generally either aluminium oxide (white, pink, ruby red, brown, grey, etc.)
silicon carbide (black or green),
ceramic (blue and pink) or any combination of these.

Aluminium oxide is by far the most popular. It is available in the following colors: White, pink, red, ruby red, brown, and grey.
Each color has it's own grinding characteristics. Grey and brown grit are the common grits used in bench grinding and production grinding. Tough and inexpensive they are the most 'general purpose' grit found. The pink and white grits are typically used on harder steels that need a cool, friable cutting action to avoid burns. The ruby red grit is a special tough grit also used on tool steels. These grits are a little bit more expensive than the grey/brown. Ruby red is very expensive.

Silicon Carbide grits are commonly either black or green. Black silicon carbide is used to grind non-ferrous metals such as aluminium and brass and also on plastics, rubber, and stone products such as marble and granite. Black silicon carbide is a very sharp grit.

Green silicon carbide is a sharper grit than black and is used primarily for carbides, titanium and plasma sprayed materials.

Ceramic grit has the characteristic of not dulling -- It will break down or fracture into sharp corners rather than dull and pull out of the bond. This makes the wheel typically last longer and it will also provide excellent aggressive stock removal without heat build up. This grit is only made by a couple of producers and is very expensive, typically two or three times as expensive as aluminium oxide. You will normally not see a 100% ceramic grit wheel. The grit is typically mixed with aluminium oxide in various percentages from 10% up to 50%. Ceramic is used in sharpening tool steels and lower carbon steels equally well.